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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/828,956

04/20/2004

John Man Kwong Kwan

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EXAMINER

PATEL, NIRAV B

ART UNIT

PAPER NUMBER

2435

MAIL DATE

DELIVERY MODE

11/10/2010

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/828,956	Applicant(s) KWAN, JOHN MAN KWONG	
	Examiner NIRAV PATEL	Art Unit 2435	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 January 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on Jan 05, 2010 has been entered.

2. Claims 1-19 are pending. Claim 1 is amended by the applicant.

3. Examiner acknowledges receiving terminal disclaimer, filed on 1/25/2008, to overcome nonstatutory obviousness-type double patenting rejection for claims 1-19. The terminal disclaimer has been disapproved. Therefore, the double patenting rejection is maintained as below.

Claim Rejections - 35 USC § 112

4. Claims 1-19 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1-19 elements, "means for locating"; "means for modifying"; "means for calculating"; "means for representing", "means for adding", "means for subtracting", "means for computing", "means for converting", are means (or step) plus function limitation that invokes 35 U.S.C. 112, sixth paragraph. However, the written description fails to disclose the corresponding structure, material, or acts for the claimed function.

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None of the recited “means” has a description of their structure or an algorithm for performing the stated function.

Applicant is required to:

(a) Amend the claim so that the claim limitation will no longer be a means (or step) plus function limitation under 35 U.S.C. 112, sixth paragraph; or

(b) Amend the written description of the specification such that it expressly recites what structure, material, or acts perform the claimed function without introducing any new matter (35 U.S.C. 132(a)).

If applicant is of the opinion that the written description of the specification already implicitly or inherently discloses the corresponding structure, material, or acts so that one of ordinary skill in the art would recognize what structure, material, or acts perform the claimed function, applicant is required to clarify the record by either:

(a) Amending the written description of the specification such that it expressly recites the corresponding structure, material, or acts for performing the claimed function and clearly links or associates the structure, material, or acts to the claimed function, without introducing any new matter (35 U.S.C. 132(a)); or

(b) Stating on the record what the corresponding structure, material, or acts, which are implicitly or inherently set forth in the written description of the specification, perform the claimed function. For more information, see 37 CFR 1.75(d) and MPEP §§ 608.01(o) and 2181.

Claims 2-19 are rejected due to dependency.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the “right to exclude” granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

5. Claims 1-19 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 41-56 of U.S. Patent No. 6,792,535. Although the conflicting claims are not identical, they are not patentably distinct from each other because:

Claims 1-19 of the instant application are anticipated by patent claims 41-56 in that the claims 41-56 of the patent contain all the limitations of the instant application (see Claim-comparison table below). Claims 1-19 of the instant application therefore is not patentably distinct from the earlier patent claim and as such is unpatentable for obvious-type double patenting (*In re Goodman (CAFC) 29 USPQ2d 2010 (12/3/1993)*).

Claim No.	Application No. 10/828,956	Claim No.	Patent 6,792,535
1	<p>An apparatus for encoding a mark into digital data, comprising:</p> <p>means for locating in the digital data, using a predetermined pattern, at least two values that represents a flat area; and</p> <p>means for modifying the values in the flat area to encode a mark into the flat area;</p> <p>wherein the means for locating in the digital data further comprises: means for calculating a variability for a selected portion of the digital data using the predetermined pattern; and</p> <p>means for representing the flat area when the variability is less than a predetermined amount;</p>	41	<p>A system for encoding a mark into unencoded data to create an encoded data, comprising:</p> <p>at least one processor coupled with at least one memory storing an encoder as at least one program comprising a target area locator for locating at least two values in the unencoded data using a predetermined pattern that represent a flat area; and</p> <p>a marker for modifying at least one of the values in the flat area encoding the mark into the flat area to create the encoded data; wherein the target area locator further performs: calculating a variability for a selected portion of the digital data using the predetermined pattern; and</p>

<p>2</p> <p>3</p>	<p>wherein the apparatus for encoding is part of a device receiving an unencoded data to create the digital data; and wherein the apparatus for encoding is part of the device using the values in the flat area to create an encoded data.</p> <p>The apparatus of claim 115, wherein the predetermined pattern is a regular pattern.</p> <p>The apparatus of claim 115, wherein the predetermined pattern is an irregular pattern.</p> <p>The apparatus of claim 115, wherein the predetermined pattern identifies a consecutive set of values.</p>	<p>51</p> <p>52</p>	<p>representing the flat area when the variability is less than a predetermined amount.</p> <p>The system of claim 41, wherein the predetermined pattern is a regular pattern.</p> <p>The system of claim 41, wherein the predetermined pattern is an</p>
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4	The apparatus of claim 115, wherein the means for modifying the values further comprises: means for modifying the values according to a recognizable amount.	53	irregular pattern. The system of claim 41, wherein the predetermined pattern identifies a consecutive set of values.
5	The apparatus of claim 119, wherein the means for modifying the values further comprises: means for adding the recognizable amount to the values.	42	The system of claim 41, wherein the marker is further comprised of: the marker modifies at least one of the values according to a recognizable amount.
6	The apparatus of claim 119, wherein the means for modifying the values further comprises: means for subtracting the recognizable amount from the values.	43	The system of claim 42, wherein the marker is further comprised of: the marker adds the recognizable amount to at least one of the values.
7	The apparatus of claim 119,	44	The system of claim 42, wherein

8	further comprising the means for computing the recognizable amount includes: a means for calculating a function of the variability in the flat area.		the marker is further comprised of: the marker subtracts the recognizable amount to at least one of the values.
	The apparatus of claim 122, wherein the means for computing the recognizable amount further comprises: means for computing the recognizable amount as a	45	The system of claim 42, wherein the marker is further comprised of: the marker computes the recognizable amount as a function of the variability in the flat area.
9	multiple of the variability in the flat area. The apparatus of claim 119, further comprising: means for modifying the values in the flat area to provide at least one known peak in the flat area.	46	The system of claim 45, wherein the marker is further comprised of: the marker computes the recognizable amount as a multiple of the variability in the flat area.
10	The apparatus of claim 115,	47	The system of claim 42, wherein

11	<p>wherein the means for modifying the values further comprises:</p> <p>means for modifying at least two of the values in the digital data to represent a single mark value in the flat area.</p>	48	<p>the marker modifies values in the flat area to provide at least one of the known peaks in the flat area.</p>
12	<p>The apparatus of claim 115, further comprising: means for locating in the digital data, using a predetermined pattern, at least two values that</p>	49	<p>The system of claim 41, wherein the marker modifies multiple of the values in the digital data to represent a single mark value in the flat area.</p>
13	<p>represents a second flat area; and means for modifying the values in the second flat area to encode the mark into the second flat area.</p>		
	<p>The apparatus of claim 115, further comprising: means for converting the format of the digital data.</p>		<p>The system of claim 41, wherein the target area locator further locates in the digital data using the predetermined pattern that represents a second flat area; and wherein the marker further modifies at least one of the values in the second flat area to encode the mark into the second</p>

14	The apparatus of claim 115, at least one of the means is implemented using a computer accessing a memory .	50	flat area.
15	The apparatus of claim 115, wherein the device is included in a computer receiving the unencoded data.		The system of claim 42, at least one of the processors coupled with at least one of the memories storing at least one program comprising a format conversion engine for converting the digital data to another format.
16	The apparatus of claim 115, wherein the device communicates with a processor within a computer to create the encoded data within the computer.		
17	The apparatus of claim 115, wherein the predetermined pattern is one dimensional.	54	The system of claim 41, wherein the predetermined pattern is one dimensional.
18	The apparatus of claim 115, wherein the predetermined pattern is two dimensional.	55	The system of claim 41, wherein the predetermined pattern is two dimensional.

19	The method of claim 115, wherein the predetermined pattern is three dimensional.	56	The system of claim 41, wherein the predetermined pattern is three dimensional.
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Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to NIRAV PATEL whose telephone number is (571)272-5936. The examiner can normally be reached on 8 am - 4:30 pm (M-F).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Vu can be reached on 571-272-3859. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic

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Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Nirav Patel /

Examiner, Art Unit 2435